## A NEW BLACKBERRY FROM NEW HAMPSHIRE

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During the summers of 1915 and 1917 I devoted much of my attention to the genus *Rubus* as it occurs in central and northern New Hampshire, collecting and preparing more than 6000 sheets of material, included under 295 numbers. A full series of the more significant species was sent, at his request, to the late Dr. Ezra Brainerd for study. One species in particular, one of the most characteristic trailing or low-arching and entangling brambles of the Pemigewasset Valley in Grafton County, is the subject of this note. In the 1915 collection it was called by Brainerd *R. Groutianus* Blanchard and material under that name was widely distributed; but, convinced by a study of the 1917 collections that it constitutes a distinct species, Brainerd consistently labeled the later collections "*Rubus severus* Brainerd, ined," and under this name I distributed the duplicates.

In Brainerd & Peitersen's Blackberries of New England—their Classification, however, published two years later, no recognition was accorded the species, even as a "hybrid," for Brainerd's notes on the sheets in the Gray Herbarium indicate that it might be sought, if not under the new name R. severus, at least under R. elegantulus or a cross of that and R. vermontanus, var. viridifolius; Brainerd's labeling in the Gray Herbarium reading: "Revision by Ezra Brainerd. Jan. 1918. Rubus severus Brainerd, ined. Combines the characters of R. elegantulus Blanch. with those of R. vermontanus var. viridifolius Blanch." That Brainerd did not comment on this and much other New England material which he had studied in the herbarium may well have been due to a desire first to see the new species growing. Declining strength and advanced years made such an ambition impossible of fulfillment and R. severus has lain unpublished until the present time. In view of Brainerd's conviction, expressed in letters as well as on the labels and wholly coinciding with the fieldjudgment of the collector, that R. severus is a distinct species, it seems desirable to give it this belated publication.

Rubus severus Brainerd, n. sp. in Gray Herb., arcuans deinde prostratus; turionibus deinde ramosissimis apice radicantibus 0.5–3 m. longis aculeis 2–4 mm. longis rigidis rectis vel curvatis divergentibus vel subretrorsis subulatis basi dilatatis valde armatis, setis glanduliferis sparse intermixtis; foliis quinquefoliolatis longe petiolatis, petiolis

<sup>&</sup>lt;sup>1</sup> Brainerd & Peitersen, Vt. Agr. Expt. Sta. Bull. 217 (1920).

armatis, foliolis anguste obovatis subcoriaceis acuminatis basi rotundatis glabris vel glabratis petiolulatis supra nigro-viridibus subtus pallidiviridibus grosse duplicato-serratis 4-13 cm. longis 2-8 cm. latis, petiolulis armatis mediis valde elongatis 1.5-4 cm. longis; foliis trifoliolatis subtus minute pilosis glabratisque foliolis elliptico-obovatis 2-7 cm. longis 1-3.5 cm. latis; inflorescentia racemoso-paniculata vel subcorymbiformi foliosa interrupta 0.5-2.3 dm. longa; rhachibus remote retrorse aculeatis minute pilosis; pedicellis filiformibus 2-5 cm. longis aculeis aciculiformibus remotis setis glanduliferis plus minusve intermixtis armatis; sepalis deltoideo-ovatis caudato-acuminatis 4-8 mm. longis; petalis oblongis 9-11 mm. longis 4-5 mm. latis; fructibus globosis; putaminibus semiorbicularibus 2.8-3 mm. longis 1.6-2 mm. latis valde reticulatis.—Pemigewasset Valley, Grafton Co., New Hampshire: dry thickets and borders of woods, Lincoln, July 28, 1917, Fernald, no. 15,754; dry thickets and clearings, North Woodstock, Woodstock, August 7, 1915, Fernald, no. 11,765; springy thickets and banks, North Woodstock, August 7, 1915, Fernald, no. 11,768 (TYPE in Gray Herb.). dry thickets and roadsides, North Woodstock, July 6, 1915, Fernald, no. 11,780; river-gravels, North Woodstock, July 6, 1915, Fernald, no. 11,782 (all material of 1915) distributed as R. Groutianus Blanchard); dry woods and recent clearings, North Woodstock, August 20, 1917, Fernald, no. 15,616; border of sphagnous bog, North Woodstock, August 20, 1917, Fernald, no. 15,618; swampy thickets near Lost River, Woodstock, July 31, 1917, Fernald, no. 15,752; bushy intervale, Woodstock, August 3, 1917, Fernald, no. 15,806; dry thickets, borders of woods and roadsides, Thornton Gore, Thornton, August 27, 1917, Fernald, nos. 15,608, 15,745; dry thickets, clearings and roadsides, Thornton Gore, Thornton, July 28, 1917, Fernald, no. 15,753.

From Rubus elegantulus Blanchard, near which Brainerd seems to have placed R. severus, it is at once distinguished by its much more prostrate canes, having much more abundant prickles with occasional gland-tipped setae interspersed; subcoriaceous foliage, with less sharp serration; more prickly and usually glandular-setulose pedicels; smaller flowers; and drupelets with narrower stones. R elegantulus, as shown by Blanchard's abundant material, is upright, without glands on young canes or inflorescences; the prickles rather remote; the serration of the membranaceous 5-foliolate leaves very slender and elongate (much as in R. recurvans Blanchard); the pedicels more pilose, either unarmed or bristly but not glandular; the petals about 1.5 cm. long, 5-7 mm. broad; the stones of the drupelets broadly ovoid or suborbicular.

Only in its trailing or low-arching habit and its often branching corymbiform inflorescence is Rubus severus closely approached by

R. vermontanus, var. viridifolius. The latter has acicular, not broadbased and hard, crowded prickles on the much more slender canes; its leaves are thinner and, even in the largest 5-foliolate leaves, the longest petiolule is only 0.7–2.5 cm. long; the longest fruiting pedicels only 2–3 cm. long, more abundantly acerose and glandular-setose.

Rubus Groutianus Blanchard, as shown by the Blanchard material in the Gray Herbarium, differs at once from R. severus in its more slender canes with more crowded and strongly recurving arched and more acicular prickles, without intermixed glands; much smaller leaves, the middle petiolule of the 5-foliolate leaves only 0.5–1.5 cm. long; the inflorescence copiously setose, with pedicels at most 1.5–2.5 cm. long; the stones of the drupelets suborbicular or broadly ovate.

GRAY HERBARIUM.

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